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(54) Title: SPAN-Xb GENE AND PROTEIN FOR THE DIAGNOSIS AND TREATMENT OF CANCER

(57) **Abstract:** The present invention relates to methods for diagnosing cancer in a subject. The method involves obtaining a biological sample from a subject and measuring SPAN-Xb expression level in the biological sample. The SPAN-Xb expression level in the biological sample is compared to the SPAN-Xb expression level in a control sample from a subject devoid of cancer, where a greater SPAN-Xb expression level in the biological sample compared to the SPAN-Xb expression level in the control sample is indicative of the subject having cancer. Methods for monitoring progression/regression of cancer in a subject are also disclosed. The present invention also relates to methods of treating a subject with cancer. The method involves administering to the subject a therapeutically effective amount of an agent capable of eliciting an immunological response against SPAN-Xb protein or specifically recognizing a SPAN-Xb protein, under conditions effective to treat a cancer characterized by cells expressing SPAN-Xb.